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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Revision of Part 22 of the  
Commission's Rules Governing  
the Public Mobile Services

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CC Docket No. 92-115

TO: The Commission

REPLY COMMENTS

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November 5, 1992

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## SUMMARY

In their respective Comments filed in this proceeding, Claircom Communications Group, L.P. ("Claircom") and GTE Service Corporation ("GTE") were in agreement in suggesting several modifications to the proposed Part 22 rules governing or affecting the Air-Ground service, including: (1) expanding the types of filings in the 800 MHz Air-Ground service that would be treated as "minor" modifications; (2) establishing the exact time frame in which pre-grant construction may commence; (3) eliminating the exclusion of Air-Ground facilities located between Line A or Line C and the U.S.-Canada border from pre-grant construction authority; (4) eliminating the requirement to mark the station call sign on every transmitter; (5) excluding transmissions from airborne units in the Air-Ground service from the station identification requirement; (6) relieving individual licensees located on leased towers of the responsibility to ensure compliance with lighting and marking requirements; (7) making clear that Air-Ground frequencies may be used to provide service to both commercial and non-commercial aircraft; (8) modifying the proposed transmitter frequency tolerances; and (9) eliminating the requirement that Air-Ground applicants include a projection of system capacity. Claircom urges the Commission to adopt these proposals.

Claircom also supports GTE's request to clarify the definition of "Airborne Station" to make clear that the term encompasses use on aircraft regardless of whether such aircraft

are on the ground or in flight. Similarly, Claircom strongly supports clarifying that "Air-Ground Radiotelephone Service" includes both sound and non-sound transmissions such as facsimile and data. The Commission should also clarify that "Air-Ground Radiotelephone Service" includes Air-Ground "access" type services.

Claircom joins GTE in urging the Commission to complete expeditiously its transition from the 1927 North American Datum geographic coordinates to the 1983 North American Datum coordinates. In addition, Claircom shares GTE's belief that because the 800 MHz Air-Ground service shares communications channels, a first-to-file application procedure is inappropriate for this service. Claircom supports the specific procedures proposed by GTE for resolving conflicts between mutually exclusive ground station applications, so long as the Commission also requires Air-Ground licensees filing an application for a new ground station to serve copies of such application on all active Air-Ground licensees.

Claircom disagrees with GTE's suggestion that the locations of low-power ground stations should be excluded from the list of the reference coordinates of existing ground stations. Such station locations should be listed because they affect the placement of future ground stations. In addition, the 800 MHz Air-Ground rules should expressly provide for the deletion from such list the reference coordinates where ground station operations have been abandoned.

Claircom also disagrees with GTE's proposal to state that the power levels referenced in new §22.861 (Emission Limitations) refer to peak power levels. Measuring the peak power of a sideband with conventional equipment is inherently difficult, and the results of such measurements are dependent on the modulation method employed and subject to varying interpretation. Claircom suggests that both total and sideband power levels be measured by averaging the power over one second.

The Commission previously concluded that permitting ancillary services in the Air-Ground frequencies on a secondary basis would increase spectrum efficiency and encourage the Air-Ground licensees to utilize the spectrum most efficiently and to introduce new technologies. Although the Commission committed over two and one-half years ago to initiating a rule making to consider how the provision of ancillary services should be implemented, it has yet to initiate such rule making. Claircom urges the Commission to promptly initiate this overdue rule making in order to bring the benefits of increased spectrum efficiency and new services to the public as expeditiously as possible.

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TO: The Commission

**REPLY COMMENTS**

Claircom Communications Group, L.P. ("Claircom"), by its attorneys, hereby replies to the comments filed in response to the Notice of Proposed Rule Making issued by the Federal Communications Commission (the "Commission" or "FCC") in the above-captioned proceeding.<sup>1/</sup>

**I. THE COMMISSION SHOULD ADOPT MODIFICATIONS TO THE NEW PART 22 RULES PROPOSED BY BOTH CLAIRCOM AND GTE**

In its Comments, Claircom strongly supported the Commission's efforts to update, simplify and streamline the Part 22 Rules.<sup>2/</sup> In addition, Claircom suggested several modifications to the proposed rules governing or affecting the Air-Ground service in order to better achieve the Commission's goals. GTE Service Corporation ("GTE"), the only other Air-

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<sup>1/</sup> See Notice of Proposed Rule Making, 7 FCC Rcd 3658 (FCC 92-205) (released June 12, 1992) ("Notice").

<sup>2/</sup> See Comments of Claircom Communications Group, L. P., filed October 5, 1992 ("Claircom Comments"). Claircom is one of six permittees authorized to provide commercial 800 MHz air-to-ground ("Air-Ground") service on a nationwide basis.

Ground licensee that filed comments in this proceeding, largely supports Claircom's proposals.<sup>3/</sup> Specifically, in their respective Comments, Claircom and GTE were in agreement in proposing several modifications to the new Part 22 rules, including:

(a) modifying proposed §22.123 to expand the types of filings in the 800 MHz Air-Ground service that would be treated as "minor" modifications;<sup>4/</sup>

(b) clarifying proposed §22.143 to establish the exact time frame in which pre-grant construction may commence<sup>5/</sup> and to expressly reference the August 31, 1992 Agreement with Canada

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<sup>3/</sup> See Comments of GTE Service Corporation on behalf of its affiliated domestic telephone operating, cellular, and air-ground companies, filed October 5, 1992 ("GTE Comments").

<sup>4/</sup> See Claircom Comments at 2-3; GTE Comments at 14-15. The following filings in the Air-Ground service would be classified as "minor," as long as industry concurrence was demonstrated: (1) modification of ground station channel block assignments; (2) relocation of an existing ground station's coordinates beyond the one mile requirement set forth in §22.859 of the rules; (3) establishment of a new full power ground station; and (4) establishment of a low power ground station. Claircom proposed that industry concurrence would be accomplished by the applicant obtaining prior written approval of all active 800 MHz Air-Ground licensees, the applicant's written notification to all non-active licensees, and the applicant's certification to the Commission of concurrence and notification in its filing. See Claircom Comments at 3-4.

<sup>5/</sup> See Claircom Comments at 4-5; GTE Comments at 16-17. Claircom and GTE stated that as long as the conditions for pre-grant construction set forth in proposed §22.143(g) were met, applicants should be authorized to commence construction 40 days (Claircom) or 35 days (GTE) after the date of public notice of the filing of the relevant application.

regarding the location of Air-Ground facilities in the 800 MHz frequencies;6/

(c) eliminating the exclusion under proposed §22.163(b) of Air-Ground facilities located between Line A or Line C and the U.S.-Canada border from pre-grant construction authority;7/

(d) eliminating the requirement under proposed §22.303 that the station call sign be marked on all transmitters except mobile transmitters;8/

(e) expanding proposed §22.313(a)(2) to exclude transmissions from airborne units in the Air-Ground service from the station identification requirement;9/

(f) modifying proposed §22.365 to relieve individual licensees located on leased towers of the responsibility to ensure compliance with lighting and marking requirements;10/

(g) adding a new section to proposed Subpart G to cross-reference the provisions of the Air-Ground Agreement with Canada;11/

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6/ See Claircom Comments at 5; GTE Comments at 17.

7/ See id.

8/ See Claircom Comments at 5-6; GTE Comments at 19. Claircom supports GTE's suggestion that licenses be allowed to post a diagram or chart matching transmitters to call signs. See GTE Comment at 19.

9/ See Claircom Comments at 6; GTE Comments at 20.

10/ See Claircom Comments at 7; GTE Comments at 21-22.

11/ See Claircom Comments at 7; GTE Comments at 24.



(h) clarifying proposed §22.857 to make clear that Air-Ground frequencies may be used to provide service to both commercial and non-commercial aircraft;<sup>12/</sup>

(i) modifying the proposed transmitter frequency tolerances under §22.863;<sup>13/</sup> and

(j) eliminating proposed §22.875(c)(4) which requires Air-Ground applicants to include a projection of system capacity.<sup>14/</sup>

The foregoing proposed modifications to new Part 22 of the Commission's rules are supported by both Claircom and GTE, and Claircom urges the Commission to adopt them.<sup>15/</sup>

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<sup>12/</sup> See Claircom Comments at 8; GTE Comments at 25-26. In its Comments, GTE also noted that proposed §22.805 would restrict the channels for use in the general aviation air-ground service to "non-commercial" aircraft. GTE Comments at 25. Claircom strongly concurs with GTE's request that this limitation be deleted.

<sup>13/</sup> See Claircom Comments at 8-9; GTE Comments at 28. Claircom and GTE proposed retention of the existing transmitter frequency tolerances of 0.1 ppm for ground stations and 0.2 ppm for received airborne mobile stations.

<sup>14/</sup> See Claircom Comments at 9; GTE Comments at 28.

<sup>15/</sup> In addition to the foregoing modifications proposed by both Claircom and GTE, Claircom also requested the Commission to modify proposed §22.861(a) to change the value for the ratio of total emission power for each second and higher adjacent channels to at least 46 decibels below the power of total emission. See Claircom Comments at 8.

## II. CLAIRCOM SUPPORTS ADDITIONAL MODIFICATIONS TO THE NEW AIR-GROUND RULES

### A. Clarification of Definitions

In its Comments, GTE sought clarification with respect to several definitions set forth in new §22.99.16/ Claircom strongly supports GTE's comments regarding the definitions of "Airborne Station" and "Air-Ground Radio Telephone Service." First, as GTE noted, the FCC proposes to define an "Airborne Station" as "[a] mobile station in the Air-Ground Radiotelephone Service authorized for use on aircraft in flight." As GTE further stated, an Air-Ground system will be capable of operating while an aircraft is on the ground. The current definition of Airborne Station does not include the limiting "in flight" language and there is no rationale for the addition of such a limitation. Accordingly, Claircom joins GTE in urging the Commission to eliminate the limiting "in flight" phrase.<sup>17/</sup>

Claircom also shares GTE's concerns regarding the proposed definition of "Air-Ground Radiotelephone Service." Under the existing rules, there is no definition of (and therefore no distinction between) the terms "radiotelephone" and "radiocommunication" service. Proposed Part 22 would define

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<sup>16/</sup> See GTE Comments at 6-11.

<sup>17/</sup> Similarly, Claircom also agrees with GTE's observation that the inclusion of "mobile" in the phrases "airborne mobile station," "airborne mobile transmitter," and "airborne mobile channels" in the proposed Subpart G rules is unnecessary since "airborne" by definition includes the attribute of being "mobile," and regardless of what definitions are adopted, they need to be applied consistently and with precision throughout the rules. See GTE Comments at 6-7.

"radiotelephone service" to be the "[t]ransmission of sound from one place to another by means of radio," and "radio telecommunication services" as "[c]ommunications services provided by the use of radio, including radiotelephone, radiotelegraph, and facsimile service." Under the new rules, it appears that "radiotelephone" service would be limited to the transmission of "sound," while "radiocommunication" service is interpreted by the FCC to include both sound and non-sound transmissions such as facsimile and data.

The proposed definitional distinctions raise questions with respect to the permissible scope of Air-Ground service. The new rules would define Air-Ground Radiotelephone Service" as:

A radio service in which common carriers are authorized to offer and provide radiotelephone service for hire to subscribers in aircraft.

Thus, under the proposed definition of Air-Ground Radiotelephone Service, communications in this service would be limited to the transmission of "sound" communications, and other non-sound communications, such as facsimile and data, would appear to be unauthorized. Currently, under the existing Air-Ground rules, Air-Ground service is not limited to "sound" communications.<sup>18/</sup> Moreover, the Commission's Notice offers no explanation for drawing such a distinction, nor for applying the narrower definition to Air-Ground services. Claircom submits that so long

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<sup>18/</sup> The Commission's decisions adopting rules and regulations to govern the Air-Ground service do not impose, nor do they suggest the Commission's intent to impose, such a limitation.

as the Air-Ground licensees' Air-Ground systems comply with all technical and operating requirements, subscriber demand for a given telecommunications service should dictate the scope of such service and not regulatory fiat.<sup>19/</sup>

In addition to unjustifiably limiting Air-Ground service to sound communications, the proposed definition of Air-Ground Radiotelephone Service, is overly narrow to the extent that the definition only encompasses service "to subscribers in aircraft." Claircom will soon offer to common carriers under tariff access to the nationwide Air-Ground service being provided by Claircom between commercial and non-commercial aircraft and Claircom's ground stations. Under the proposed definition, it is unclear whether such Air-Ground access services would be authorized. Claircom suggests that the following definition should apply to Air-Ground Radiotelephone Service:

A radio service in which common carriers are authorized to offer and provide radiocommunication service for hire to, or in connection with the provision of such service to, subscribers in aircraft.

This definition will clarify that the commercial Air-Ground service encompasses (1) the broader "radiocommunication service" definition and (2) Air-Ground "access" type services.

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<sup>19/</sup> Claircom notes that it is in the process of implementing an Air-Ground "data" service under the existing rules. If the Commission ultimately limits Air-Ground service to "sound" transmissions, all non-sound services proposed by Claircom or any other Air-Ground licensees at the time such limitation is adopted should be "grandfathered" under the new rules.

## B. Ancillary Services

A related matter is the provision of ancillary services by Air-Ground licensees. In its Report and Order authorizing Air-Ground service, the Commission concluded that permitting ancillary services on a secondary basis to the primary Air-Ground service would be in the public interest. See Report and Order, 5 FCC Rcd 3861, 3873 (1990). The Commission believed that authorizing ancillary services would increase spectrum efficiency and encourage the Air-Ground licensees to utilize the spectrum most efficiently and to introduce new technologies. Because Air-Ground services would require extensive coordination among the licensees and the providers of ancillary services, however, the Commission deferred authorizing such services at that time pending the initiation of a rule making to consider how the provision of ancillary services should be implemented in the Air-Ground service. See id. It has been over two and one-half years since the Report and Order was adopted and the Commission has yet to initiate a rule making proposing to authorize ancillary services on Air-Ground frequencies. Claircom urges the Commission to promptly initiate this overdue rule making in order to bring the benefits of increased spectrum efficiency and new services to the public as expeditiously as possible.

## C. Use of Geographic Coordinates

Claircom strongly supports GTE's request that the Commission expeditiously complete its transition from the 1927 North American Datum geographic coordinates to the 1983 North

American Datum coordinates.<sup>20/</sup> The maintenance of references to two sets of geographic coordinates will result in an increased margin of error and confusion in verifying an applicant's compliance with FAA requirements.

D. Procedure for Mutually Exclusive Ground Station Applications

In its Comments, GTE proposed specific procedures for handling mutually exclusive applications for Air-Ground ground stations. Essentially, GTE proposed that if mutually exclusive applications for Air-Ground ground stations are filed, the FCC would hold a settlement conference in accordance with proposed §22.135. The Air-Ground service would not be subject to a "first-to-file" cut-off; rather all applications that were filed prior to the date that the first-filed application appears on public notice would be treated as mutually exclusive. If industry concurrence is not reached through the settlement process, the FCC would select from among the mutually exclusive applications.<sup>21/</sup>

Claircom shares GTE's belief that because the 800 MHz Air-Ground service shares communications channels, a first-to-file procedure is inappropriate for this service. Claircom supports GTE's proposal for resolving conflicts between mutually exclusive ground station applications, provided that the Commission also adopts a requirement that an Air-Ground licensee

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<sup>20/</sup> See GTE Comments at 13-14.

<sup>21/</sup> See GTE Comments at 24-25.

filing an application for a new ground station serve a copy of such application on all active Air-Ground licensees.<sup>22/</sup> Because this service shares frequencies, it is imperative that there be a high degree of coordination between the licensees as their competing systems are constructed. Requiring notification of all active Air-Ground licensees will encourage coordination in advance of filing, thereby minimizing the Commission's involvement in resolving mutually exclusive applications.

### III. OTHER MATTERS

There are a limited number of matters on which Claircom disagrees with GTE. The first matter involves GTE's suggestion that the locations of low-power ground stations should be excluded from proposed §22.859 which lists the reference coordinates of existing ground stations. Claircom believes that such station locations should be listed because they affect the placement of future ground stations.

In addition, Claircom believes that the 800 MHz Air-Ground rules should expressly provide for the amendment of §22.859 to delete reference coordinates where no Air-Ground licensee is maintaining an operational ground station. If ground station operations from a station located near reference coordinates listed in the rules have been permanently discontinued by an Air-Ground licensee and no other licensee is

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<sup>22/</sup> Filings for ground stations at locations for which industry concurrence is obtained in advance would be treated as "minor" filings not be subject to the procedures for mutually exclusive applications.

operating from that location, the "abandoned" reference coordinates should be deleted in order to provide the maximum level of flexibility to Air-Ground licensees in planning future expansion of their systems.

Claircom notes that under proposed §22.317, any station that has not provided service to the public for 90 continuous days is considered to have been permanently discontinued; under proposed §22.144(c), such an authorization is automatically terminated without specific Commission action. Claircom believes that in the Air-Ground service, Air-Ground licensees should be affirmatively required to notify the Commission and other Air-Ground licensees of any ground stations where operations have been permanently discontinued. Such a requirement will assure that the placement of future ground stations by Air-Ground licensees is not unnecessarily restricted by the retention of reference coordinates where all operations have been abandoned.

Claircom also has concerns regarding GTE's request that the Commission state that the power levels referenced in new §22.861 (Emission Limitations) refers to peak power levels.<sup>23/</sup> Claircom submits that it is generally accepted that measuring the peak power of a sideband with conventional equipment is inherently difficult. Moreover, the results of such measurements are dependent on the modulation method employed and subject to varying interpretation. For example, spectrum analyzers, even when set to "peak hold" mode, do some degree of averaging,

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<sup>23/</sup> See GTE Comments at 27-28.



depending on the setting of the video filter. Similarly, peak power meters are not frequency selective and therefore cannot measure the power in a 6 kHz band. Accordingly, Claircom suggests that both total and sideband power levels be measured by averaging the power over one second. The ratio of total power to power in each immediately adjacent sideband should be 30 dB and the ratio of total power to power in each other adjacent sideband should be 46 dB.

#### IV. CONCLUSION

For the foregoing reasons, Claircom respectfully requests that the Commission modify those portions of its proposed new Part 22 rules governing the 800 MHz Air-Ground service as set forth in these Reply Comments and in Claircom's Comments. Incorporation of the suggested modifications will further the Commission's stated goals in this proceeding of updating, simplifying, and streamlining the Part 22 rules.

Respectfully submitted,

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By:



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November 5, 1992

CERTIFICATE OF SERVICE

I, Dana S. Gregory, hereby certify that a copy of the foregoing "Reply Comments" of Claircom Communications Group, L.P. has been sent by hand delivery to the following on this 5th day of November, 1992:

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